

Microsoft Windows NT 4.0 Service Pack 6a

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What is SP6a?

- **Resolves the SP6 issue with Lotus Notes and other Winsock based applications (SP5, SP5 host fixes plus SP6 hot fix).**
- **Provides the latest updates to Windows NT workstation 4.0 and Windows NT Server 4.0.**
- **Standard 56-bit encryption**
- **CryptoAPI got FIPS 140-1 validation.**
- **Contains known Year 2000 updates for Windows NT 4.0. These Year 2000 updates are also available as separate Web downloads that customers may apply to a SP4 system.**

SP6a Components in Detail

- **SP6a bundles SP5 and its post-SP5 hotfixes**
 - **Y2K fixes, Malformed LSA Request Issue, Base System Object Changes Issue, and Screen Saver Vulnerability Issue**
- **56-bit encryption (export) - more secure than 40-bit encryption**
(previous service pack came with 40-bit encryption)
- **128-bit version (North America only) available at:**
<http://www.microsoft.com/ntserver/nts/downloads/recommended/sp6a/128bitx86/>
- **SP6a adds NO new functionality, but does add 3 Y2K fixes since the release of SP5 with quality updates (drivers, and etc.)**

SP6a

- **CryptoAPI got FIPS 140-1 validation on Nov. 9, 1999**
Can have greater confidence in the security they provide
<http://www.microsoft.com/issues/FIPS140-1Summary.asp>
- **Y2K fixes**
 - 1. XIMS: NNTP Service Converts Two-Digit Years Incorrectly**
 - 2. BIOS Date Value Does Not Immediately Update on January 1, 2000 (1 hour later - Century byte in real time clock)**
 - 3. NET USER /TIMES Command Does Not Work in Year 2000**
Detailed Explanation Available at
<http://www.microsoft.com/netserver/support/faqs/sp6faq.asp>

SP6a Bug Fixes - Total 284

- **68 Base Operating System**
- **100 Networking**
- **33 Security (including multiple bugs in Security Configuration Manager MMC Snap-in (Q218934) and Security Configuration Editor UI-related problems)**
- **9 Shell**
- **7 Service Pack Setup**
- **7 Internet Authentication Service (IAS)**
- **18 Internet Information Services (IIS)**
- **9 Microsoft Message Queue Server (MSMQ)**
- **5 Microsoft Transaction Server (MTS)**
- **14 Printing**
- **14 Other**

Post-SP6a Hotfixes

- **3 hot fixes located at <ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/nt40/hotfixes-postSP6a/>**
 - **C2-fix (required in TCSEC configuration)**
3 patches are bundled:
Enabling NetBT to open IP ports exclusively (unprivileged user-mode application should not listen)
Fix for WINOBJ.EXE may let you view securable objects
Device drivers create DeviceObject
 - **PPPconn-fix (RAS server stops responding to new PPP connection requests)**
 - **winlogon-fix (appears to hang when log off after installing)**

Tests

- **Compared system with SP4, SP5 vs. SP6a using SysDiff**
 - **Some file differences between SP4 and SP5**
 - **Many differences between SP4 and SP6a**
- **Loaded SP6a on top of DII COE 4.1.2.0 NT kernel**
 - **No issues with installation**
- **Tested DII COE 4.1.2.0 NT kernel on SP6a (APM, desktop, and etc.)**
 - **No major issues**

Issues with SP6a

- **STOP 0x00000024" error message because of NTFS timing issue**

Reported on AMD K6-2 3DNow-based machine with 128 SDRAM and 6G drive subdivided between five partitions

Seemed to be hardware specific

- **Issues with some hardware and applications were resolved**

Conclusion and Recommendations

- **SP6a Includes many fixes (which were not fixed in SP5)**
Q216913 (BIOS Data Value Issue), Q231457 (LSA Request Issue), Q234557 (Image Header Problem in Kernel Issue), Q218934 (SCM MMC Snap-In Issue), and etc.
- **Known to be stable**
- **NT patch segment with SP6a including hot fixes with DII COE**
kernel 4.1.2.0 will be completed by SAIC on Feb. 11, 2000